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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/594,972

09/29/2006

Hideki Shimizu

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7590

09/03/2009

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EXAMINER

NGO, CHUONG A

ART UNIT

PAPER NUMBER

2617

NOTIFICATION DATE

DELIVERY MODE

09/03/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentmail@whda.com

Office Action Summary	Application No. 10/594,972	Applicant(s) SHIMIZU ET AL.	
	Examiner CHUONG A. NGO	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 2,5 and 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1,3,4,6-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to the Applicants' communication filed on August 12, 2009. In virtue of this communication, claims 1, 3, 4, 6-8 are currently presented in the instant application.

Drawings

2. The drawings submitted on September 29, 2006. These drawings are reviewed and accepted by the examiner.

Priority

3. Receipt is acknowledged of paper submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

4. The information Disclosure Statement (IDS) Form PTO-1449, filed on May 20, 2009 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosed therein was considered by the examiner.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Public 20040077379 (hereinafter Smith) in view of US Patent Application Public 20040087282 (hereinafter Ishikawa).

Regarding claim 1, Smith discloses “A transmission system” (**see Paragraph [0066], Fig. 2**) comprising;

Smith discloses “a first transmitter having a first antenna” (**see paragraphs [0089],[0090], Fig. 2, The first transmission signal chain 401 has in series a transmission signal combiner A 410, a transmitter A 412 and an antenna 500**); and “a second transmitter having a second antenna” (**see paragraphs [0089],[0090], Fig. 2, the second transmission signal chain 402 has a transmission signal combiner B 420, a transmitter B 422 and an antenna 510**), wherein, “in a connecting state where said first transmitter and said second transmitter are connected” (**see paragraph [0092], Fig. 2, broadcast 408**), “said first antenna and said second antenna simultaneously transmit identical information on a same transmission signal” (**see paragraph [0091], Simultaneously, both transmission signal chains 401 and 402 transmit a common overhead channel so that the overhead channel can be received anywhere within the coverage area 60**).

Although, Smith does not explicitly discloses “same transmission signal being a carrier signal”. However, attention is directed to Ishikawa, which teaches “same transmission signal being a carrier signal” (**see paragraph [0028], Fig. 1, 5, the case system is a space diversity case, namely, a case in which the**

same information (transmission signal A=transmission signal B) is transmitted from two antennas 106 and 116 with the same frequency (for example, FIG. 5)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was make to modify the Smith invention, and have same transmission signal being a carrier signal, as taught by Ishikawa, thereby, improving spectral efficiency and maintaining communication quality by making the signal resistant to interference, as discussed by Ishikawa, (see paragraphs [0004], [0005]).

Regarding claims 3, Smith disclose “wherein, said first transmitter comprises an operating means which conducts a transmitting operation, and radio field intensity outputted from said first antenna is set higher than the radio field intensity outputted from said second antenna” (see paragraph [0099], Smith discusses set different field intensity as set antenna to coverage area, thereby, with Smith invention can set different field intensity on each antenna).

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Public 20040077379 (hereinafter Smith) in view of US Patent Application Public 20030224729 (hereinafter Arnold).

Regarding claim 4, Smith discloses all the subject matters of the claimed invention concept except “using loop antenna”. However, attention is directed to Arnold, which teaches “using loop antenna” **(see paragraph [0069], antenna**

Art Unit: 2617

902 may be a monopole or dipole electric field antenna or a magnetic field loop antenna).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was make to modify the Smith invention, and have loop antenna, as taught by Arnold, thereby, providing the way to avoid unintentional interference from wireless devices, as discussed by Arnold, (see paragraphs [0003], [0005]).

8. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Public 20040077379 (hereinafter Smith) in view of US Patent Application Public 20040014457 (hereinafter Stevens).

Regarding claims 6-8, Smith discloses all the subject matters of the claimed invention concept except “biometric function to measure biometric information”. However, Stevens teaches “biometric function to measure biometric information” **(see paragraph 34-54)**.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was make to modify the Smith invention, and have biometric function to measure biometric information, as taught by Arnold, thereby, providing mobile device can use for multiple functions, as discussed by Arnold, (see paragraphs [0003], [0005]).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHUONG A. NGO whose telephone number is 571-270-

Art Unit: 2617

7264. The examiner can normally be reached on Monday through Thursday 6:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on 571-272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CHUONG A NGO/
Examiner, Art Unit 2617

/NICK CORSARO/
Supervisory Patent Examiner, Art Unit 2617